



## EXECUTIVE COMPUTING

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# Costs, benefits determine need for computer

**D**o you really need a computer? This is a question being asked more and more frequently by small-business owners, and about the only way you can answer it is to do a cost/benefit analysis. In this week's column, I'll provide you with a very simple way to do that.

If you've already done some reading about computers, you may think I'm talking about fancy, detailed documents like the "feasibility studies" done by large corporations. But that isn't realistic for most small computer applications.

My method asks you to fill in a few blanks. On one side, the costs; on the other, the benefits. Add up each side, then check to see which side outweighs the other. Once you've got the necessary facts, it probably won't take more than a few minutes — indeed, getting the facts together may be the hardest part.

### A good rule of thumb

The first step is to estimate the approximate cost of computerization for your size of business, including hardware, software, maintenance and all "hidden costs." This can vary tremendously from company to company, but here is a good rule of thumb: Retail and distribution businesses typically spend about 4 percent of gross revenues up to the first \$1 million plus 2 percent of all revenues in excess of \$1 million. Service companies and manufacturers typically spend about 7 percent of the first \$1 million plus 3.5 percent of the excess.

Once you've used the rule of thumb to calculate the total cost, divide by three to reflect amortization over three years. Even though many leasing and financing arrangements stretch over five years, I feel that it is more reasonable to expect the machine to last just three years before it becomes obsolete. After

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dividing by three, you'll have a quick and dirty annual cost estimate. Later in the buying process, you'll want to replace this with more accurate figures, but it will do for now.

Here are a couple of examples:

✓ A retail shop with three locations and annual sales of \$2.25 million yields the following cost equations:  $(\$1,000,000 \times .04) + (\$1,250,000 \times .02) = \$65,000$ . And,  $\$65,000 \div 3 = \$21,666$ , which is your annual cost estimate.

✓ A law firm that receives \$500,000 in fees before expenses:  $(\$500,000 \times .07) = \$35,000$ . And,  $\$35,000 \div 3 = \$11,666$ , the annual cost estimate.

Remember, this calculation includes all costs, including the computer itself, printers, disk drives and maintenance; all software, including custom programming and consultants; and hidden costs such as supplies, computer insurance, and security costs.

Historically, hardware costs will average 60 percent of the total costs over the life of the system, with software and hidden costs taking 30 percent and 10 percent, respectively. In my examples, here is how the annual costs would break down: The retail shop would have hardware costs of \$13,000 a year, software costs of \$6,500 and hidden costs of \$2,166. The law firm would have hardware costs of \$7,000, software costs of \$3,500 and hidden costs of \$1,166.

I've included some simplified cost/benefit worksheets in my book, "How to Select Your Small Computer . . . Without Frustration". To find out how to get a copy, write me at the address below.

Bear in mind that these estimates are for small companies computerizing all their key applications. You can spend less than this by automating one application at a time, expanding gradually.

## Estimating the benefits

So, you have a rough estimate of annual costs. To complete the analysis, you need to get an idea of benefits. I suggest that you consider the benefits from just the two or three most important clerical operations in your business. To expect one computer to handle more than two or three applications is unrealistic anyway.

In the example of the retail business, this might include inventory control, order processing and accounts payable. The law office might start with word processing, time accounting and accounts receivable. You should be able to identify these operations quickly.

Next, to continue your "quick and dirty" estimates, calculate how much you currently spend each year on labor costs (salaries and benefits) to perform these operations manually, and divide the total by three. This assumes that your new computer installation will give you a cost savings of 33 percent of your current manual costs.

If the total benefits number you come up with is more than the costs number from the previous calculation, it's time to computerize your business. Your competitors probably have already done so, so don't delay.

What if your cost-benefit analysis doesn't favor computerization? You have two choices: You can wait until the economics of your business change, or you can computerize a portion of your operation via outside, contract computer services. More about that in a future column.

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